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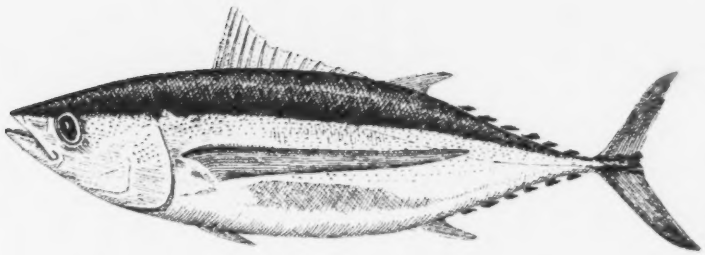
Integrated Fisheries Management Plan Summary

Albacore Tuna (*Thunnus alalunga*)
Pacific Region
2013/2014



The purpose of this Integrated Fisheries Management Plan (IFMP) summary is to provide a brief overview of the information found in the full IFMP. This document also serves to communicate the basic information on the fishery and its management to DFO staff, legislated co-management boards and other stakeholders. This IFMP provides a common understanding of the basic "rules" for the sustainable management of the fisheries resource. The full IFMP is available on request.

This IFMP summary is not a legally binding instrument which can form the basis of a legal challenge. The IFMP can be modified at any time and does not fetter the Minister's discretionary powers set out in the *Fisheries Act*. The Minister can, for reasons of conservation or for any other valid reasons, modify any provision of the IFMP in accordance with the powers granted pursuant to the *Fisheries Act*.

Where DFO is responsible for implementing obligations under land claims agreements, the IFMP will be implemented in a manner consistent with these obligations. In the event that an IFMP is inconsistent with obligations under land claims agreements, the provisions of the land claims agreements will prevail to the extent of the inconsistency.

GENERAL INTRODUCTION / OVERVIEW — IFMP Section 1

The Pacific Canadian fishery is focused on highly migratory Albacore tuna (Thunnus alalunga) using troll gear. Harvest of Pacific Albacore is currently made using hook and line (jig) gear, primarily by troll, which involves towing artificial lures behind vessels travelling at approximately 6 knots. Net gear is not permitted.

The coastal fleet operates in the Canadian EEZ and the high seas under the authority of a vessel-based licence with Schedule II privileges. Vessels without any Schedule II privileges may fish for tuna species on the high seas under the authority of a Section 68 (high seas only) licence. Annually, there are approximately 150 vessels that access the Canadian EEZ and approximately 30 vessels that fish on the high seas.

In accordance with fishing and port access privileges under the Canada/USA Pacific Albacore Tuna Treaty, Canadian vessels are permitted to fish for Albacore tuna in the USA EEZ. More information regarding vessels fishing pursuant to the Treaty can be found in Appendix 6 of the IFMP.

With the exception of permanent and seasonal closures (Appendix 5 of the IFMP), the Pacific Albacore tuna fishery will be open from April 1 to March 31 each year in the Canadian EEZ and the high seas (not including the USA EEZ).

STOCK ASSESSMENT, SCIENCE & TRADITIONAL KNOWLEDGE — IFMP Section 2

Stock Assessment

The most recent stock assessment was completed in June 2011 by scientists of the ISC[1] Albacore Working Group (ALBWG), which is comprised of scientists from Canada, Japan, Taiwan, USA, Mexico, Korea, the Inter-American Tropical Tuna Commission (IATTC), and the Secretariat of the Pacific Community (SPC). The 2011 assessment was conducted with a statistical catch-at-age forward estimating population dynamics model (Stock Synthesis 3, SS3), that computes population dynamics and trends and fits this model to fisheries and biological data simultaneously. Model results are used to develop scientific advice on current stock status and 25 year projections into the future from the last model year (2009 in the assessment) are used to develop conservation advice for resource managers. The 2011 stock assessment used a new growth curve that better represents growth in this stock than the growth curve used in the 2006 assessment. Further detail and results of the 2011 assessment can be found in Section 2.4 of the IFMP. Although there is uncertainty in the absolute estimates of biomass (total and SSB) and fishing mortality, the stock status and conservation advice are relatively insensitive to these uncertainties as trends in SSB and recruitment are robust to the different plausible assumptions that were tested. The north Pacific albacore stock is considered to be healthy at the current level of fishing mortality, $F_{2006\text{-}2008}$, and average historical recruitment and the stock is expected to fluctuate around the long-term median SSB (~400,000 t) in the foreseeable future. The ISC concluded that the sustainability of the stock is not threatened by overfishing and that the stock likely is not in an overfished condition, although biomass-based reference points have not been

[1] International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean

established for this stock. However, recruitment is a key driver of the population dynamics in this stock and a more pessimistic recruitment scenario (25% below average historical recruitment) increases the probability that the stock will not achieve current management objectives.

Ecosystem Interactions

North Pacific Albacore are found in the epipelagic zone of sub-tropical and temperate waters of the open ocean and are strongly associated with frontal structures as these are areas of sharp temperature changes (fronts) and often high primary production, which attracts prey species. Albacore maintain a fast, continuous swimming lifestyle and are opportunistic top predators, feeding primarily on fish. Small schooling pelagic species including sardine (*Sardina pilchardus, Sardinops sagax*), anchovy (*Engraulis* spp.), and mackerel (*Scomber* spp., *Trachurus* spp.) are the most common fish encountered in the diet of Albacore in all oceans. Along the west coast of North America, Pacific hake (*Merluccius productus*), Pacific saury (*Cololabis saira*), Pacific herring (*Clupea pallasii*), northern anchovy (*Engraulis mordax*), and squids are important prey in the diet of juvenile Albacore while sardine (*S. sagax*) are not important, despite a resurgence in sardine abundance. Adult Albacore have few predators, although they occasionally may be preyed on by large marine mammals, sharks, and billfishes.

Trolling operations are carried out at or close to the surface of the ocean and catches of non-target fish species and turtles, marine mammals and seabirds are generally negligible in troll fisheries world-wide. Trolling gear does not make contact with the seabed and contact with the epipelagic zone is minimal because of the nominal dimensions of the fishing gear. Incidental catch reported in the Canadian north Pacific Albacore fishery includes skipjack tuna (*Katsuwonus pelamis*), Pacific bluefin tuna (*Thunnus orientalis*), dolphinfish or mahi-mahi (*Coryphaena hippurus*), yellowtail (*Seriola lalandi*), blue shark (*Prionace glauca)* and shortfin mako shark (*Isurus oxyrinchus*). Species which have no commercial value may be returned to the sea alive immediately after hooking, as fish are caught individually and barbless hooks are commonly used, so stress and injuries can be kept to a minimum.

Aboriginal Traditional Knowledge / Traditional Ecological Knowledge

Aboriginal Traditional Knowledge and Traditional Ecological Knowledge in the form of observations and comments collected from commercial and aboriginal harvests over many years contributed to decisions on scientific survey locations and are considered in management decisions. At present, ATK/TEK is not available for Albacore.

ECONOMIC, SOCIAL, CULTURAL IMPORTANCE — IFMP Section 3

The Pacific Region tuna fleet traditionally has access to three zones for fishing tuna: the Canadian EEZ, the USA EEZ, and international high seas waters. See Appendix 1 of the IFMP for recent statistics on the tuna fleet's catch and effort in all three zones.

The most recent limitation regime (also known as fishing regime) under the Canada/USA Pacific Albacore Tuna Treaty expired on December 31, 2011. Agreement on a new fishing regime was not in place for the 2012 season; as such, the Canadian fleet did not have access to the US EEZ for albacore tuna fishing in 2012. Formal Treaty negotiations are ongoing between the two countries. Please see Appendix 6 of the IFMP for more information on the Treaty.

Generally, the purpose of this section in Integrated Fish Management Plans is to provide a profile of the fisheries as a baseline against which future trends can be measured and monitored. However, due to the recent changes noted above, an overview of the impacts from the expiration of the Treaty are highlighted to help to build a common understanding of the current socioeconomic context. Please refer to section 3.3 of the IFMP for further details.

SHARED STEWARDSHIP ARRANGEMENTS — IFMP Section 8

There are no formal shared stewardship arrangements (i.e. Joint Project Agreements) for tuna in the Pacific region. However, stakeholders work closely with Fisheries Management staff in pre-season, in-season, and post-season processes, providing expert knowledge and specialized experience to inform management decisions and cooperatively develop solutions to management issues.

GOVERNANCE PROCESS — IFMP Section 1

National

Management of Albacore tuna is directed by the Fisheries Act and the regulations made thereunder. These documents are available on the internet at: http://www.dfo-mpo.gc.ca/acts-loieng.htm.

The IFMP is developed annually through consultations with the Tuna Advisory Board (TAB), which provides recommendations and advice to the Department on policy and management of the tuna fishery.

International

Pacific Albacore tuna is managed internationally by two Regional Fisheries Management Organizations (RFMO's): the Inter-American Tropical Tuna Commission (IATTC) and the Western and Central Pacific Fisheries Commission (WCPFC). Both of these RFMO's, to which Canada is a member, have in place conservation and management measures to ensure sustainable management of Pacific Albacore tuna. The International Scientific Committee (ISC) provides scientific advice regarding the status and conservation of tuna and billfish stocks and non-target species to both the IATTC and WCPFC for consideration. The IATTC is responsible for the conservation and management of tunas and billfishes in Pacific Ocean waters east of 150°W longitude and the WCPFC is responsible for waters west of 150°W longitude. Additional information can be found at the following websites:

WCPFC: http://www.wcpfc.int/
IATTC: http://www.iattc.org/HomeENG.htm
ISC: http://isc.ac.affrc.go.jp/

ACCESS AND ALLOCATIONS IFMP Section 6

The Minister can, for reasons of conservation or for any other valid reasons, modify access, allocations, and sharing arrangements as outlined in this IFMP in accordance with the powers granted pursuant to the *Fisheries Act*.

First Nations

Aboriginal harvest of Pacific Albacore for FSC purposes may occur coast wide where authorized by a communal licence. To date, no limits have been placed on aboriginal harvest for food, social and ceremonial purposes. There is no known FSC fishery for Pacific Albacore tuna.

Recreational

Recreational harvest of Pacific Albacore may occur coast wide if authorized by a British Columbia Tidal Waters Sport Fishing Licence. The daily limit for Pacific Albacore tuna is 20 pieces and the possession limit is 40 pieces. There is a limited opportunistic recreational fishery off the west coast of Vancouver Island.

Commercial

Commercial harvest for Albacore tuna is permitted in the high seas, Canadian waters and USA waters (harvest in USA waters is pursuant to the Canada/USA Albacore Tuna Treaty). Please see Appendix 6 of the IFMP for details relating to the Treaty. There is no annual total allowable catch in the Pacific Albacore tuna fishery; however Canada is required to maintain fishing effort at current levels based on IATTC Conservation and Management Measure (CMM) C-05–02 and WCPFC CMM 2005-03. Please see Section 4.3.3 of the IFMP for more details.

MANAGEMENT OF THE FISHERY **IFMP Sections 4, 5 and 7**

#	Management Issue	Objectives	Management Measure
1	Improved Fishery Monitoring and Catch Reporting.	Meet conservation objectives and ensure healthy and productive fisheries and ecosystems. Base management decisions on the best available scientific information.	All vessels fishing for tuna must meet the hail requirements when beginning fishing, changing fishing zones, or finishing the season. All vessels must complete harvest logs which details daily catch, effort, and position as well as interactions with non-target species. Logbooks are due at the end of the season, but the Department is encouraging submission of logbooks in-season in order to obtain timely and reliable catch and effort information. The Department also continues to pilot an electronic logbook program in the tuna fishery. Vessels will be required to use a Vessel Monitoring System, as per IATTC and WCPFC management requirements and outlined in Conditions of Licence.
2	Licensing of the Canadian Waters and High Seas Fleet.	Manage fisheries to provide opportunities for economic prosperity. Provide stability, transparency, and predictability in fisheries management and improved governance.	Starting in 2013, licensing the Canadian and high seas fleet through a separate Category CT tuna licence in order to improve identification and monitoring of the tuna fleet. The CT licence is available to vessels that hold valid vessel-based licences. Licence conditions allows the fishery manager to outline species, gear, closures, reporting requirements, and other international management requirements (i.e. seabird avoidance, sea turtle mitigation, data buoy interactions, etc.). The CT tuna licence will also provide a mechanism for the Department to control effort if it is determined that Canada

			is not meeting their international obligations not to increase harvest effort for albacore tuna beyond a certain level. High seas only (Sec 68) licences will still be available to those vessels that are not authorized to fish tuna using a CT licence. All tuna vessels must be on the registered list of authorized vessels to fish in the IATTC and/or WCPFC Convention Areas, as per their respective management measures in place. The Department will continue to collect the necessary information for each tuna vessel and submit the updated lists to the appropriate commission.
3	Canada/USA Pacific Albacore Tuna Treaty	Manage fisheries to provide opportunities for economic prosperity. Provide stability, transparency, and predictability in fisheries management and improved governance.	The Department will continue to work with the Government of the United States towards a renewed fishing regime under the Treaty for reciprocal fishing and port access to the Canada/US Exclusive Economic Zones. Updates will continue to be provided to industry via Fishery Notice. Further details on the Treaty can be found in Appendix 6 of the IFMP.

COMPLIANCE PLAN — IFMP Section 9

Users of the resource have a responsibility to report violations. Any suspected or actual fisheries, wildlife or pollution violations can be quickly and discretely reported to the appropriate enforcement officer by using the toll free Observe, Record and Report hotline. This toll free number is available 24 hours a day.

OBSERVE, RECORD and REPORT: 1-800-465-4DFO (1-800-465-4336)

Enforcement enquiries can also be directed to the local field offices during regular office hours.

Regional Compliance Program Delivery

Enforcement of the tuna fishery will be tempered by commitments to higher priority issues, such as species at risk, CSSP and fisheries that have conservation concerns. C&P staff will pursue opportunities to monitor and enforce problems related to the tuna fishery in conjunction with the monitoring and enforcement activities dedicated to the identified priority fisheries in the Pacific region.

Fishery Officers conduct a range of activities to promote compliance during the tuna fishery. These activities include attending industry and working group meetings, defining key enforcement concerns with Fisheries Management prior to the commercial fishery, in-season monitoring of compliance with Conditions of Licence, aerial surveillance, and detailed post-season reporting.

PERFORMANCE REVIEW — IFMP Section 10

Assessment of the 2012/2013 fishery objectives against the stated Performance Measures is available in the Post-Season Review (Appendix 1 of the IFMP).

The fishery is evaluated in the areas of stock conservation, consultation, and compliance. The review also includes catch and effort summaries for the 2012/2013 season.

FISHERIES AND OCEANS CONTACT

For additional information on this IFMP Summary or to request an electronic version of the full IFMP, please contact Jordan Mah at 604-666-2188 or Jordan.Mah@dfo-mpo.gc.ca.